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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,123	04/08/2004	Yukio Hosaka	251598US0	8635
22850	7590	10/15/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER RACHUBA, MAURINA T	
			ART UNIT 3723	PAPER NUMBER
			NOTIFICATION DATE 10/15/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/820,123

Applicant(s)

HOSAKA ET AL.

Examiner

Maurina Rachuba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-23 is/are pending in the application.
- 4a) Of the above claim(s) 7, 8, 22 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03 August 2007 has been entered.

Election/Restrictions

2. Claims 7 and 8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 05 April 2006.

3. This application contains claims 7 and 8 drawn to an invention nonelected with traverse in the reply filed 05 April 2006. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

4. Newly submitted claims 22-23 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims are directed to the species of the pad consisting of the water-insoluble matrix material, with no other additives, a different species than that originally presented

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Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 22-23 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. **On allowance of a linking or generic claim, claims 22-23 will be rejoined.**

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-6, and 10-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 252 973 A1 (cited by applicant) in view of Petroski et al, 2004/0018809, as set forth in the previous Office action. '973 discloses an abrasive pad (see [0036]) comprising: an abrasive substrate having a polishing surface; and a light transmitting member, wherein each of the abrasive substrate and the light transmitting member comprise a water-insoluble matrix material and a water-soluble substance dispersed in the water-insoluble matrix material, wherein each of the water-insoluble matrix material of the abrasive substrate and the light transmitting member comprise a same polymer, and wherein the light transmitting member is attached to the abrasive substrate. '973 does not explicitly disclose that the member is fused to the substrate. In a similar apparatus, '809 teaches in a CMP polishing pad that a light transmitting member may be fused to a substrate. Because both references teach methods of attaching light transmitting members to substrates, it would have been obvious to one of ordinary skill in the art to substitute one method of attaching for the

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other to achieve the predictable result of permanently assembling the substrate and member. Note that '973 teaches the claimed materials for both the soluble and insoluble materials.

Response to Arguments

7. Applicant's arguments filed 03 August 2007 have been fully considered but they are not persuasive. Applicant argues that '973 does not teach fusing the member to the substrate, while '809 does not teach the claimed materials. It is the examiner's position that '973 discloses the claimed invention except that the member is not fused to the substrate. However, '809 clearly teaches that it is known to fuse a light transmitting member to a substrate, whatever the materials, to more securely hold the member to the substrate. That applicant claims different materials than '809 is moot, '809 is not relied on to teach the claimed materials, '973 clearly discloses the claimed materials. Applicant argues that '809 fails to recognize the same advantages as taught by applicant. The examiner disagrees, '809, [0007]-[0009] clearly teaches that fusing, by injecting the material of the light transmitting member in a liquid state and allowing the material to permeate the substrate and **to cool**, thereby fusing the member to the substrate, results in a stronger bond between the member and substrate. Applicant argues that '809 teaches *diffusion* and not fusion. Diffusion is defined as: the process whereby particles of liquids, gases, or solids intermingle as the result of their spontaneous movement caused by **thermal agitation** and in dissolved substances move from a region of higher to one of lower concentration¹ Applicant, specification

¹ Merriam-Webster Online Dictionary copyright © 2005 by Merriam-Webster, Incorporated

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page 16, defines "fuse" as "The term "fused" refers to a state in which the light transmitting member and the abrasive substrate are bonded) together by melting at least the bonding surface(s) of both or **one of them** without using an adhesive". (emphasis added). It is hard to determine how this is not the same process.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note applicant's other applications, listed as PGPUB documents. Note that dependent on any future amendments, double patenting rejections may be appropriate.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurina Rachuba whose telephone number is 571 272 4493. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571 272 4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/M. Rachuba/
Primary Examiner
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